contacting the Pan B antibody with the biological sample,

separating the complexed antibody-lipoprotein particles from the biological sample, and

determining the amount of Apo C-III associated with Apo B, which is the amount of Apo C-III present in VLDL in the sample; and

determining the amount of HDL in the sample by

determining the amount of Apo C-III present in the HDL in the sample by

providing Apo A-I monoclonal antibody immunoreactive specifically with Apo A-I,

providing monoclonal antibody immunoreactive with Apo C-III,

contacting the antibody reactive with Apo C-III with the biological sample to form complexes between the antibody and the Apo C-III containing lipoprotein particles,

contacting the anti-Apo A-I antibody with the biological sample,

separating the complexed antibody-lipoprotein particles from the biological sample,

determining the amount of Apo C-III associated with Apo A-I, which is the amount of Apo C-III present in HDL in the sample, and

determining the ratio of Apo C-III present in VLDL in the sample and Apo C-III present in HDL in the sample which is the ratio of VLDL to HDL,

wherein the VLDL and HDL are measured in the same sample using immobilized antibodies or measured by immunoprecipitation in separate samples.

16. (three times amended) A method for determining the relative ratio of VLDL to

HDL comprising

determining the amount of VLDL in the sample by

determining the amount of Apo E present in the VLDL in the sample by

providing Pan B antibody which is characterized by an equal binding and high affinity for all Apo B-containing lipoproteins in human plasma,

providing monoclonal antibody which binds to Apo E associated predominantly with VLDL,

contacting the antibodies reactive with Apo E associated with VLDL with the biological sample to form complexes between the antibodies and Apo E containing particles,

[separating the complexed antibody-ApoE containing particles from the biological sample,]

contacting Pan B antibody with the biological sample, and

determining the amount of Apo E associated with Apo B which is the Apo E present predominantly in VLDL in the sample;

removing the complexed anti-Apo E:Pan B:Apo E containing particles by immobilization of the anti-Apo E antibodies or centrifugation of complexed particles;

and

determining the amount of HDL in the sample by

determining the amount of Apo E present in the HDL in the sample by

providing Apo A-I monoclonal antibody immunoreactive specifically with Apo A-I,

providing monoclonal antibody which binds to Apo E predominantly associated with HDL,

contacting the antibodies reactive with Apo E to the biological sample to form complexes between the antibodies and Apo E containing particles,

[separating the complexed antibody-ApoE containing particles from the biological sample, ]

contacting Pan B antibody with the biological sample,

determining the amount of Apo E associated with Apo A-I, which is the amount of Apo E present in HDL in the sample, and

determining the ratio of Apo E present in VLDL in the sample and Apo E present in HDL in the sample which is the ratio of VLDL to HDL.

Please ~~cancel~~ claim 17.

18. (three times amended) A composition for determining the concentration of a lipoprotein, apolipoprotein, or lipid associated with a single specific lipoprotein in a biological sample comprising:

monoclonal or recombinant antibody molecules specifically immunoreactive with a single specific lipoprotein or apolipoprotein (solution), wherein the antibody molecules are selected from the group consisting of monoclonal antibodies, recombinant antibodies, and monoclonal antibody fragments that specifically bind to a stable, conformation independent epitope which is uninfluenced by the lipid content of the lipoprotein, apolipoprotein, or lipid associated with a

C3

specific lipoprotein.

30. (three times amended) The composition of claim 18 for determining the relative ratio of LPA-I and LPA-II lipoprotein particles comprising

C4

monoclonal Apo-A-I antibody [which binds] specifically immunoreactive with Apo A-I lipoproteins in human plasma; and

monoclonal Apo A-II antibody specifically immunoreactive [specifically] with Apo A-II.

41. (amended) The method of claim [12] 15 wherein binding of the second antibody

C5

forms a precipitate of the [antigen and both bound antibodies] antibody:lipoprotein complex which can be detected in a solution.

Lack of AB.

42. (amended) A method for determining the relative ratio of LDL to HDL in a biological sample comprising

C6

determining the amount of LDL in the sample by

adding to the sample monoclonal antibody molecules immunoreactive with low density lipoprotein and not cross-reactive with high density lipoprotein and determining the amount of low density lipoprotein;

determining the amount of HDL in the sample by

adding to the sample monoclonal antibody molecules immunoreactive with high density lipoprotein and not cross-reactive with low density lipoprotein and determining the amount of high density lipoprotein; and

determining the ratio of the amount of low density lipoprotein with the amount of high